

We Claim:

1. An earth-working bucket adapted for conversion to a combination excavator and subsoiler implement and further adapted for pivotal attachment to an excavating machine, comprising:

(a) opposing side walls joined by a generally concave pan, said pan having a leading edge at the bottom of the bucket and a trailing edge at the top of the bucket, and each of said side walls having an edge in proximity to said leading pan edge and trailing pan edge, wherein together said leading pan edge, trailing pan edge and said side wall edges define a bucket opening;

(b) pivotal attachment means near the top of said bucket and;

(c) a shank socket incorporated into each of said opposing side walls and having an open end, said socket adapted to receive and secure a proximal end of a subsoiling shank having a substantially pointed, earth-working distal end, wherein said open end of said socket and said bucket opening are oriented in generally opposite directions from one another.

2. The earth-working bucket of Claim 1, wherein said shank socket is adapted to receive at least one removable fastener for securing said subsoiling shank within said socket.

3. The earth-working bucket of Claim 1, wherein each of said opposing side walls comprises an extension that is exterior to said pan and is tapered toward said open end of the socket.

4. The earth-working bucket of Claim 3, wherein said extension on each of said side walls comprises a coulter blade.

5. The earth-working bucket of Claim 1, and further comprising a subsoiling shank secured within said shank socket.

6. The earth-working bucket of Claim 5, wherein said subsoiling shank lies substantially in a first plane and comprises at least one wing lying in a second plane that is substantially perpendicular to said first plane.

7. The earth-working bucket of Claim 5, wherein said subsoiling shank has a curvilinear profile.

8. The earth-working bucket of Claim 7, wherein the bottom of the bucket lies in a third plane and the distal end of said subsoiling shank extends from the shank socket to beyond said third plane.

9. The earth-working bucket of Claim 6, wherein each of said opposing side walls comprises an extension that is exterior to said pan and is tapered toward said open end of the socket, and the extension comprises a coulter blade disposed between said bottom of the bucket and said at least one wing.

10. A method for conducting dissimilar soil management activities including excavation and subsoiling, comprising:

- a. providing an excavator bucket and subsoiler implement comprising an excavator bucket and a subsoiler shank having an earth-working end, wherein said excavator bucket and said earth-working end are disposed with respect to one another such that when the excavator bucket is in an operable position for excavation, then the earthworking end is in an idle position for subsoiling, and vice versa;
- b. operating said implement to employ said subsoiler shank to penetrate the soil to a predetermined depth and moving the earth-working end through said soil along a path in a plane beneath, and generally parallel to, the soil surface to thereby loosen the soil beneath said surface; and

- c. operating said implement to employ said bucket to excavate at least a portion of said loosened soil.

11. The method of Claim 10, wherein said plane is below a zone of soil compaction.

12. The method of Claim 10, wherein said combination excavator bucket and subsoiler implement further comprises a coulter blade, and the method includes operating said implement against organic debris so as to shear said debris with said coulter blade.

13. The method of Claim 10, wherein said path is at a depth of approximately 24-30" below the soil surface.

14. A method for preparing an area having soil compaction for reforestation in a single pass over said area with an implement, comprising the steps of:

- a. providing a combination excavator bucket and subsoiler implement comprising an excavator bucket and a subsoiler shank having an earth-working end, wherein said excavator bucket and said earth-working end are disposed with respect to one another such that when the excavator bucket is in an operable position for

- b. operating said implement to employ said subsoiler shank to penetrate the soil to a predetermined depth and moving the earth-working end through said soil along a path in a plane beneath, and generally parallel to, the soil surface to thereby loosen the soil beneath said surface; and
- c. operating said implement to employ said bucket to excavate at least a portion of said loosened soil.

15. The method of Claim 14, wherein said area of reforestation is selected from the group consisting of a forest road, skid trail, a landing and a legacy compaction area.